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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,947	10/21/2003	Masayuki Fujimoto	038849.52804US	3296

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EXAMINER

PHAM, HAI CHI

ART UNIT PAPER NUMBER

2861

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/688,947	<b>Applicant(s)</b> FUJIMOTO, MASAYUKI	
	<b>Examiner</b> Hai C. Pham	<b>Art Unit</b> 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/21/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 2, 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyamoto et al. (U.S. 5,900,961).

Miyamoto et al. discloses a scanning optical device comprising a laser scanning unit, wherein the laser scanning unit comprises a frame body (optical casing 1), a semiconductor laser (laser unit 202) for emitting a laser beam, the semiconductor laser being installed inside the frame body, a polygon mirror (203) for causing the laser beam to scan on a photosensitive drum (23), a motor (203) for rotating the polygon mirror, the motor being placed inside the frame body and having the polygon mirror mounted (Fig. 7B), and a circuit board (Fig. 7A) for packaging two circuits of a semiconductor laser drive circuit for controlling the driving of the semiconductor laser and a motor drive circuit for controlling the driving of the motor (the IC device 208 controlling the laser unit

202, the motor 203) (col. 4, lines 50-56), the circuit board being provided in an area a predetermined distance apart from an area where the motor is placed in the frame body (the circuit board being positioned outside the optical casing 1 separate from the laser unit and the motor by an opening of the cover 212) (col. 4, lines 61-67).

Miyamoto et al. further teaches a motor mounting member only having a motor mounting function, wherein the motor is mounted inside the frame body via the motor mounting member (the motor 203 mounted on the bottom and inside of the housing 201) (Fig. 7B).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto et al. in view of Suwa (U.S. 4,533,976).

Miyamoto et al. discloses all the basic limitations of the claimed invention except for the circuit board made of paper phenol and the flexible cables.

Suwa teaches an electronic unit provided on printed circuit board made of paper phenol, a low cost material, including flexible cables for connecting the various components.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use paper phenol for the circuit board and flexible cables for interconnection in the device of Miyamoto et al. as taught by Suwa. The motivation for doing so would have been to use a rigid but low cost material to carry the electronic components.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto et al. in view of Suzuki et al. (JP 9-15521).

Miyamoto et al. discloses all the basic limitations of the claimed invention except for the laser being adjustable.

Suzuki et al. discloses an optical scanning device having a laser light source device mounted on the optical box (35) and being provided with a rotatable mechanism (37) for adjusting the position of the light emitting points of the laser light source (26) so as to adjust the pitch of the laser beams in the sub-scanning direction.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the adjustable mechanism for adjusting the laser beam pitch in the device of Miyamoto et al. as taught by Suzuki et al. the motivation for doing so would have been to allow the laser printer to print at a plurality of resolutions.

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto et al. in view of Suwa and Suzuki et al.

Miyamoto et al. discloses all the basic limitations of the claimed invention (please refer to the rejection in the paragraph 3 above) but fails to teach the circuit board made of paper phenol and the flexible cables.

Suwa teaches an electronic unit provided on printed circuit board made of paper phenol, a low cost material, including flexible cables for connecting the various components.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use paper phenol for the circuit board and flexible cables for interconnection in the device of Miyamoto et al. as taught by Suwa. The motivation for doing so would have been to use a rigid but low cost material to carry the electronic components.

Miyamoto et al. also fails to disclose the laser being adjustable.

Suzuki et al. discloses an optical scanning device having a laser light source device mounted on the optical box (35) and being provided with a rotatable mechanism (37) for adjusting the position of the light emitting points of the laser light source (26) so as to adjust the pitch of the laser beams in the sub-scanning direction.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the adjustable mechanism for adjusting the laser beam pitch in the device of Miyamoto et al. as taught by Suzuki et al. the motivation for doing so would have been to allow the laser printer to print at a plurality of resolutions.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on (571) 272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HAI PHAM  
PRIMARY EXAMINER

June 25, 2005